



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/574,561	04/04/2006	Akiko Kawashima	1009682-000158	1861
21839 7590 10/06/2008 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404				
EXAMINER				
CARR, DEBORAH D				
ART UNIT		PAPER NUMBER		
1621				
NOTIFICATION DATE		DELIVERY MODE		
10/06/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary

Application No.

10/574,561

Applicant(s)

KAWASHIMA ET AL.

Examiner

DEBORAH D. CARR

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☒ Claim(s) 14-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. The finality of the rejection of the last Office action is being withdrawn in light of the following new rejections.
2. Applicant's arguments with respect to claims 10-13 have been fully considered and are persuasive. The rejection of claims 10-13 has been withdrawn. However new rejections are deemed proper based on the newly cited reference cited below.
3. Applicant's arguments filed 9 July 2008 regarding claims 6-9 have been fully considered but they are not persuasive and rejection is being maintained for the reasons below.
4. The indicated allowability of claims 14-17 is withdrawn in view of the newly discovered reference(s) to Csiba et al. (CS - 237747). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-9 rejected under 35 U.S.C. 103(a) as being unpatentable over JP-
11/152260.

Applicant has amended the claims to exclude carboxylic amide derivatives and maintain the argument that the reference only teaches the preparation of amideamine oxide. While the deletion of "derivatives" may exclude the amideamine oxide specifically taught in JP'260, it still does not overcome the rejection of the claims. The amideamine oxide is produced by oxidizing a carboxylic/fatty amide.

As stated in the previous office action:

Sections [0001] and [0009] specifically disclose the amidation process producing the fatty amide. The preparation of the carboxylic amide derivative includes the presence of phosphonic acid and results in a compound with good colouring.

The instant process is still rendered obvious by JP'260 because the amidation process is disclosed.

7. Claims 6-13 rejected under 35 U.S.C. 103(a) as being unpatentable over JP-11/152260 in view of Gruning et al. (US Pat. 5,470,992).

JP'260 discloses a method for the production of carboxylic/fatty amide represented by formula (1) wherein the a diamine with a carboxylic/fatty acid or a lower ester thereof is combined with an organic phosphoric acid compound that corresponds to the compounds represented by formula (5).

Although the content of the organophosphoric acid is expressed in terms of "wt%", if the content of the organophosphoric acid is converted from "mo%" units to "wt%" units

then it becomes apparent that the content range disclosed in document 1 overlaps with the specific content range that is set forth in the present application.

The claims differ by not converting the carboxylic/fatty amide into its betaine derivative. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to derivatize the carboxylic/fatty amide disclosed by JP'260 to a betaine as shown by US'992.

It is conventionally known in the art to quaternize carboxylic/fatty amides into betaines. If one were interested in obtaining betaine with good colouring, utilizing a carboxylic/fatty amide as prepared in claims 6-9 would have been an obvious.

Therefore, there cannot be considered a significant difference between the inventions in question, it would have been obvious to modify JP'260 to obtain the inventions set forth in claims 10-13.

8. Claims 6-9, 14-17 rejected under 35 U.S.C. 103(a) as being unpatentable over JP-11/152260 in view of Csiba et al. (CS-237747).

JP'260 discloses a method for the production of carboxylic/fatty amide represented by formula (1) wherein the a diamine with a carboxylic/fatty acid or a lower ester thereof is combined with an organic phosphoric acid compound that corresponds to the compounds represented by formula (5).

Although the content of the organophosphoric acid is expressed in terms of "wt%", if the content of the organophosphoric acid is converted from "mo%" units to "wt%" units then it becomes apparent that the content range disclosed in document 1 overlaps with the specific content range that is set forth in the present application.

The claims differ by not converting the carboxylic/fatty amide into its quaternary ammonium salt derivative. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to derivatize the carboxylic/fatty amide disclosed by JP'260 to a quaternary ammonium salt as shown by CS747.

It is conventionally known in the art to quaternize carboxylic/fatty amides into quaternary ammonium salts. If one were interested in obtaining betaine with good colouring, utilizing a carboxylic/fatty amide as prepared in claims 6-9 would have been obvious.

Therefore, there cannot be considered a significant difference between the inventions in question, it would have been obvious to modify JP'260 to obtain the inventions set forth in claims 14-17.

Allowable Subject Matter

9. Claims 18-21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBORAH D. CARR whose telephone number is (571)272-0637. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel M. Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Deborah D Carr/
Primary Examiner
Art Unit 1621

Ddc